

ABB BALDOR RELIANCE III

Customer information packet

IDDRPM18304C

30HP, 1745RPM, 3PH, 60HZ, 1852C, DPG-FV, FT/2

Specifications

Enclosure	DPFV
Frame	FL1852CZ
Frame Material	Exposed Laminations
Frequency	60.00 Hz
Output @ Frequency	30.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CCSA US
	UR
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	39.000 A @ 460.0 V
Duty Rating	CONT
Enclosure Modification	FORCE VENT
Feedback Device	NO FEEDBACK
Frame Prefix	FL
Heater Indicator	No Heater
High Voltage Full Load Amps	39.0 a
Insulation Class	H
Motor Standards	NEMA
Mounting Arrangement	F1
Overall Length	23.01 IN
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Service Factor	1.00
Shaft Diameter	1.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1745 rpm

Part Detail

Revision	D
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	L1206A
Layout	617236-023
Eff. date	01-21-2022
CD Diagram	422927-001
Poles	04
Leads	
Proprietary	False
Created date	04-10-2015

Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat

Nameplate

000613006MY									
	DUTY	HP	RPM	AMPS	VOLTS	HZ			
	CONT	30	1745		39	460		60	
	CONT	30	2300		36.5	460		79.1	
	CONT	30	3475		38	460		120	
CAT.NO.	IDDRPM18304C			SPEC. NO.	P18T0331				
SER.NO				FR	FL 1852CZ	INSUL	H		
PH.	3	MAX SAFE SPEED			7200	AMB.	40	MIN. AMB.	-25
DESIGN NO.	L1206A			TYPE		ENCL.	DP		
S.F.	1.0			D.E. BRG.	45BC02JPP30A				
ENCL MOD	FORCE VENT			O.D.E. BRG.	35BC02JPP30A				

000613006MY

	DUTY	HP	RPM	AMPS	VOLTS	HZ	
	CONT	30	1745	39	460	60	
	CONT	30	2300	36.5	460	79.1	
	CONT	30	3475	38	460	120	
CAT.NO.	IDDRPM18304C		SPEC. NO.		P18T0331		
SER.NO			FR	FL 1852CZ	INSUL	H	
PH.	3	MAX SAFE SPEED		7200	AMB.	40	MIN. AMB. -25
DESIGN NO.	L1206A		TYPE		ENCL.	DP	
S.F.	1.0		D.E. BRG.	45BC02JPP30A			
ENCL MOD	FORCE VENT		O.D.E. BRG.	35BC02JPP30A			

Parts List

Part number	Description	Quantity
WS286787	WS P18T0331	1.000 ea
RA282995	RA P18T0331	1.000 ea
000613006MY	NP-RPMAC INVERTER DUTY	1.000 ea
000613006MY	NP-RPMAC INVERTER DUTY	1.000 ea
033519002GC	SCREW, SELF TAPPING	4.000 ea
LB1613	LABEL, QR CODE, ADHESIVE LABEL	1.000 ea
000692000XM	LABEL QR CODE	1.000 ea
411716004A	219P039 - 219P039 - LA	1.000 ea
033775004EA	DRSCR #6-1/4 304 S.S.	4.000 ea
422927001	C/D LABEL	1.000 ea
032003200CB	FL1852 THRU BOLT	4.000 ea
BP5248	BP5248	1.000 ea
033102012AG	HXNUT LEAD CONN 1/4-20 GR5 ZP	4.000 ea
034017012AB	LCKW 1/4 STD. PLATED 034017012AF	4.000 ea
036000016DB	HHCS	2.000 ea
036000050JB	M8-1,25 X 50 MHHCS	2.000 ea
400638001D	WAVEN (Customer number 43699)	1.000 ea
411693051B	LUG, LIFTING	2.000 ea
807580023BAA	BRKT,DE,FL180	1.000 ea
BP5068BJ01	BRUSH, .187 X .187 X 1.00	1.000 ea
807580024AAC	BRKT,ODE,FL180,DPFV	1.000 ea
000613006NT	NAME PLATE IEC	1.000 ea
032018004DK	HHCS,DRIP COVER	4.000 ea
032018006CK	HHCS 3/8-16X3/4L PLATED 411409	4.000 ea
034017014AB	LCKW 3/8 STD. PLATED	4.000 ea
036000012HB	HHCS M6X12MM LONG PLATED	2.000 ea
036000012HB	HHCS M6X12MM LONG PLATED	3.000 ea
036000012HB	HHCS M6X12MM LONG PLATED	3.000 ea
036000020HB	HHCS M6-1.0X20MM PLATED	4.000 ea
036000040JB	HHCS,DE BRKT (M8-1.25X40MM PLTD.) AA	4.000 ea
036200030HB	M6 STUD	4.000 ea

036200055HB	M6 STUD	2.000 ea
036500008AB	METRIC H.NUT M6-1.0 PLTD	6.000 ea
036600008AB	MFWSH M6 PLATED	6.000 ea
036601008AB	M6 FLAT WASHER	3.000 ea
036620009AB	M8 EXTERNAL LK WASHER	1.000 ea
065530000B	GASK	1.000 ea
075451000A	COVER, CONDUIT BOX	1.000 ea
410978010A	FLANGE, INLET BLOWER	1.000 ea
410978011A	GRILL, INLET BLOWER HSG	1.000 ea
415000103G	TLUG	1.000 ea
417733001A	GSK C/ BOX BASE	2.000 ea
418010006A	CAST,MPLATE,180-280,EX1,7BY	1.000 ea
418018074A	GROUND LABEL G100 METRIC 160 D.C.	1.000 ea
422919374	HHCVR KIT,FL180,DPFV,DE/ODE	1.000 ea
422919374	HHCVR KIT,FL180,DPFV,DE/ODE	1.000 ea
600164003A	WHEEL, BLOWER	1.000 ea
610490001B	12M 2P TENV VER 56C SUPER E, CE	1.000 ea
706305301A	GUARD, SHAFT	1.000 ea
706313063F	BLOWER HOUSING	1.000 ea
706320003A	CONDUIT BOX	1.000 ea
807505070D	DUCT, BLOWER	1.000 ea
418057243A	GROOVE PIN	1.000 ea
807504053D	FL180 TEAO FRAME	1.000 ea
000640000P	TAG WINDING THERMOST	1.000 ea
004824007CQR	C2 PAINT SYSTEM MEDIUM GRAY CHARCOAL MET	0.100 ea
034180022FA	KEY 3/8X3/8X2-3/4 L	1.000 ea
418018116	WARNING PLATE	1.000 ea
036500008AB	METRIC H.NUT M6-1.0 PLTD	2.000 ea
036601008AB	M6 FLAT WASHER	2.000 ea
LB1549	LABEL, BLANK 1.375 X 2.250 IMPRINTABLE	1.000 ea
004824007AB	PAINT,XT	0.100 ea

REL S.O.	-	VOLTS	460	ENCLOSURE	DPFV	WYE CONN EQ CKT OHMS PER PHASE		
FRAME	FL1852	AMPS	39	MAX SAFE RPM	7200	(AT BASE RATING, 25 °C)		
HP	30	DUTY	CONT	IM (AMPS)	17.5	R1	.211	X1 .727
BASE SPEED	1745	S.F.	1.0	P.F.@NL/FL	.080/.838	R2	.155	X2 .742
PHASE/HERTZ	3/60	AMB °C/INSUL	40/H	WK ² (Lb-Ft ²)	.8			XM 12.7

RATED FULL LOAD DATA

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1745	30.0	90	460	60	41.2
MAX SPEED	3473	30.0	45	460	120	38.7
MIN SPEED	0	0	90	25.5	1.83	41.2

LOAD PERFORMANCE AT BASE SPEED

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1800	0	0	460	60	21.2
1/4	1787	7.50	22	460	60	23.1
1/2	1774	15.0	44	460	60	27.4
3/4	1760	22.5	67	460	60	33.6
FULL LOAD	1745	30.0	90	460	60	41.2
O/L	1666	57.3	181	460	60	80.9

REMARKS: TYPICAL DATA



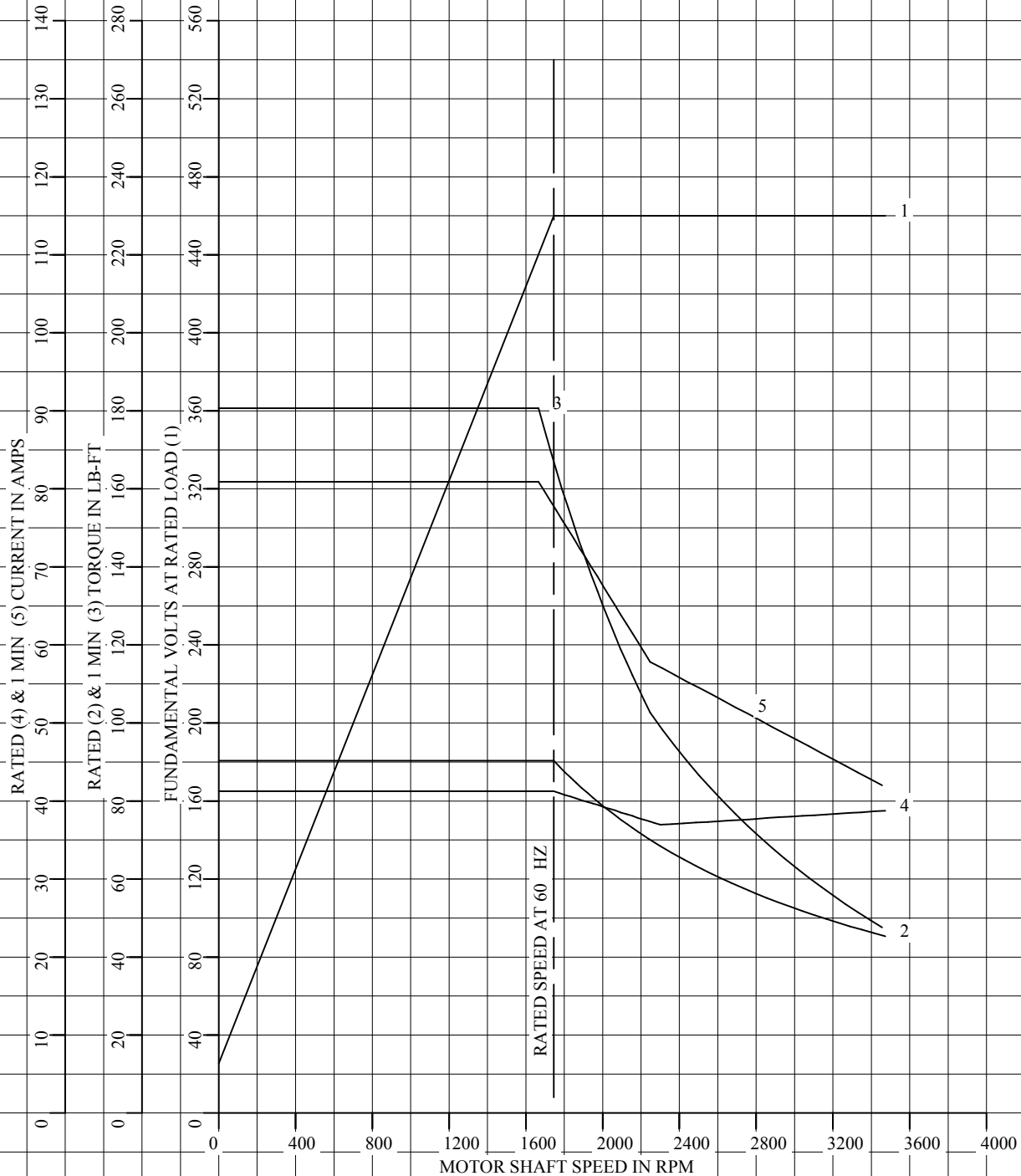
DR. BY	B. GRANT
CK. BY	B. GRANT
APP. BY	T. EVON
DATE	3-31-98

**A-C MOTOR
PERFORMANCE DATA** L1206A

ISSUE DATE 12-12-13 Page 8 of 13

REL S.O.	-	VOLTS	460	ENCLOSURE	DPFV	WYE CONN EQ CKT OHMS PER PHASE		
FRAME	FL1852	AMPS	39	MAX SAFE RPM	7200	(AT BASE RATING, 25 °C)		
HP	30	DUTY	CONT	IM (AMPS)	17.5	R1 .211	X1 .727	
BASE SPEED	1745	S.F.	1.0	P.F. @NL/FL	.080/.838	R2 .155	X2 .742	
PHASE/HERTZ	3/60	AMB °C/INSUL	40/H	WK ² (Lb-Ft ²)	.8		XM 12.7	

VARIABLE SPEED AC MOTOR CURVES



REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



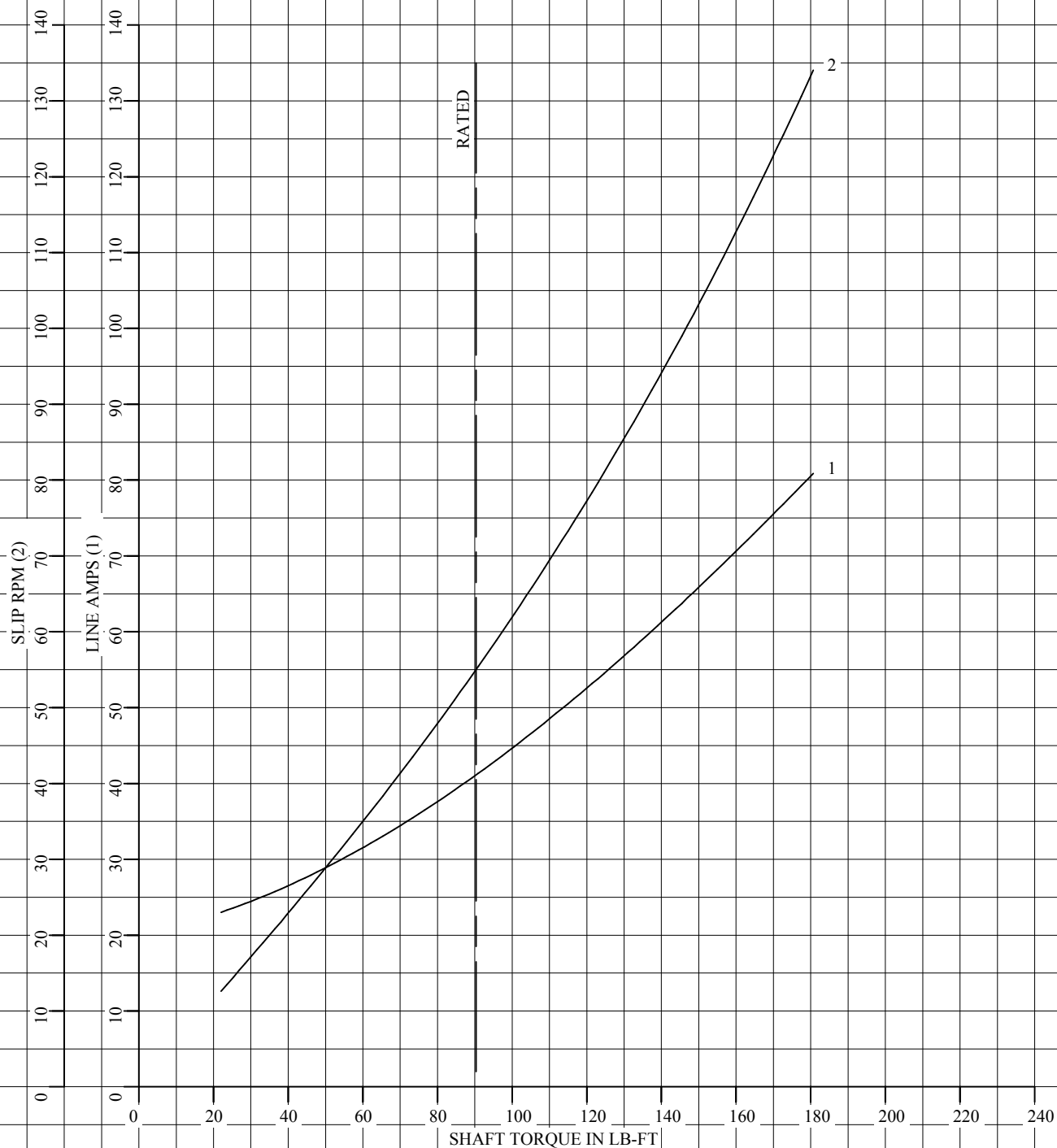
DR. BY B. GRANT
CK. BY B. GRANT
APP. BY T. EVON
DATE 3-31-98

**A-C MOTOR
PERFORMANCE
CURVES**

L1206A
SH 1 OF 2
ISSUE DATE 12-12-13 Page 9 of 13

REL S.O.	-	VOLTS	460	ENCLOSURE	DPFV	WYE CONN EQ CKT OHMS PER PHASE	
FRAME	FL1852	AMPS	39	MAX SAFE RPM	7200	(AT BASE RATING, 25 °C)	
HP	30	DUTY	CONT	IM (AMPS)	17.5	R1 .211	X1 .727
BASE SPEED	1745	S.F.	1.0	P.F. @NL/FL	.080/.838	R2 .155	X2 .742
PHASE/HERTZ	3/60	AMB °C/INSUL	40/H	WK ² (Lb-Ft ²)	.8	XM 12.7	

LOAD PERFORMANCE (CONSTANT V/HZ RANGE)



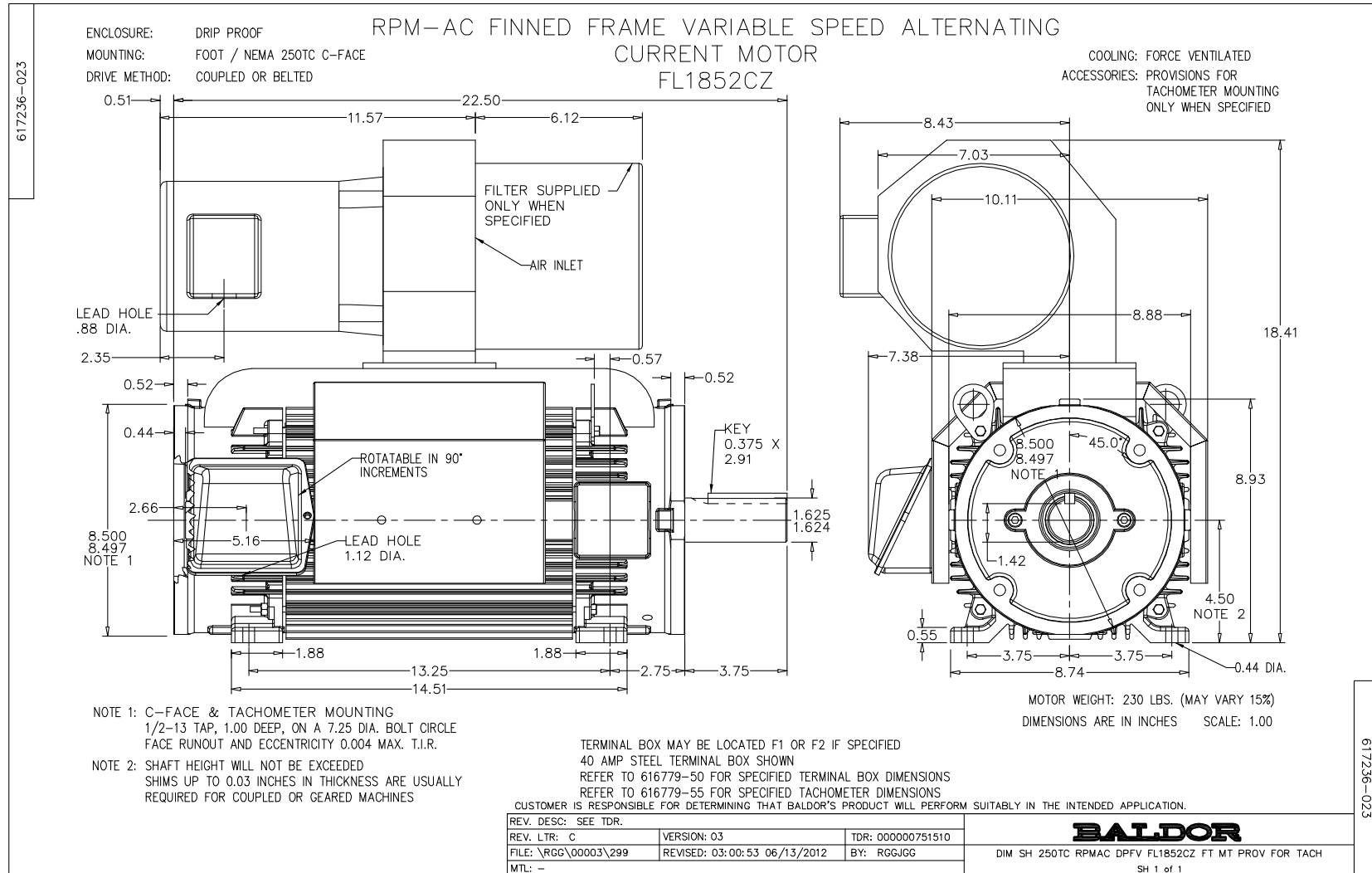
REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

BALDOR
A MEMBER OF THE ABB GROUP

DR. BY B. GRANT
CK. BY B. GRANT
APP. BY T. EVON
DATE 3-31-98

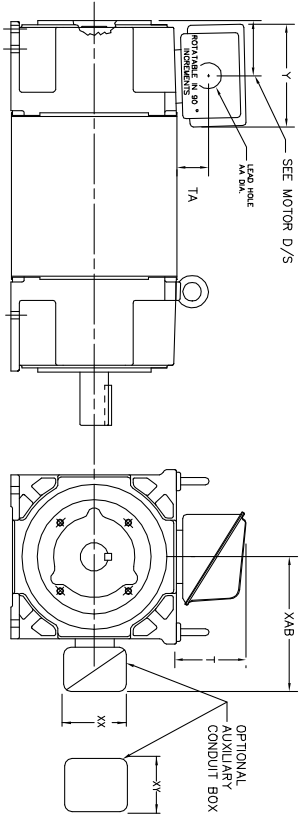
**A-C MOTOR
PERFORMANCE
CURVES**

L1206A
SH 2 OF 2
ISSUE DATE 12-12-13



INDUSTRIAL ALTERNATING CURRENT MOTORS
RPM AC

STEEL, CAST IRON, MILL AND TERMINAL BOARD CONDUIT BOX DIMENSIONS
NEMA FRAMES RL210 thru RL280 and IEC FRAMES RDL132 thru RDL180
NEMA FRAMES FL180 thru FL280 and IEC FRAMES FDL112 thru FDL180



FRAME	TYPE	TERMINAL STRIP	AMPS	C/BOX	Y	TA	T	AA
FL180	STEEL	N	40	706320003A	5.00	1.62	3.00	1.12
FL180	STEEL	Y/N	75	706320003A	6.12	2.35	4.38	1.75/2.00
FL180	STEEL	N	208	706320007A	6.62	2.00	7.00	2.50/2.00
FL180	CAST IRON	Y/N	208	706320004C	6.75	2.50	4.38	1.0/1.75
FL180 & FDL11	MILL	Y	100	706310056A	7.75	2.30	4.40	PG29/PG16

FL210 & RL210	STEEL	N	61	075452000B	6.34	2.00	4.12	1.75
FL210 & RL210	STEEL	N	121	075452001A	7.69	2.38	5.25	1.94
FL210 & RL210	STEEL	N	305	706320016A	9.00	4.12	8.44	4.59
FL210 & RL210	CAST IRON	N	110	075460052B	7.25	2.50	5.25	1.5 TAP
FL210 & RL210	MILL	Y	100	706310229A	7.75	2.30	4.40	PG29/PG16
FL210 & RL210	MILL	Y	160	706310056A	9.00	3.06	5.40	PG36/PG16
FL210 & RL210	MILL	Y/N	235	706310056B	11.42	4.00	6.72	2.50

FL250 & RL250	STEEL	N	61	075452000B	6.34	2.00	4.12	1.75
FL250 & RL250	STEEL	N	121	075452001A	7.69	2.38	5.25	1.94
FL250 & RL250	STEEL	N	305	706320016A	9.00	4.12	8.44	4.59
FL250 & RL250	CAST IRON	N	110	075460052B	7.25	2.50	5.25	1.5 TAP
FL250 & RL250	CAST IRON	N	210	706320013A	10.50	4.88	9.00	4.0 TAP
FL250 & RL250	MILL	Y	100	706310229A	7.75	2.30	4.40	PG29/PG16
FL250 & RL250	MILL	Y	160	706310056B	9.00	3.06	5.40	PG36/PG16
FL250 & RL250	MILL	Y/N	235	706310057A	11.42	4.00	6.72	2.50
FL250 & RL250	MILL	Y	400	706310063B	14.39	7.43	12.15	BLANK

FL280 & RL280	STEEL	N	160	706320029A	7.25	3.50	7.06	2.50
FL280 & RL280	STEEL	N	305	706320016A	9.00	4.12	8.44	4.59
FL280 & RL280	STEEL	N	500	702658001C	14.62	7.56	12.70	5.00
FL280 & RL280	CAST IRON	N	140	706320012B	9.25	4.81	8.56	3.0 TAP
FL280 & RL280	CAST IRON	N	210	706320013A	10.50	4.88	9.00	4.0 TAP
FL280 & RL280	CAST IRON	N	510	706320014D	15.00	7.56	12.81	5.0 TAP
FL280 & RL280	MILL	Y	100	706310056A	7.75	2.30	4.40	PG29/PG16
FL280 & RL280	MILL	Y	160	706310056B	9.00	3.06	5.40	PG36/PG16
FL280 & RL280	MILL	Y/N	235	706310057A	11.42	4.00	6.72	2.50
FL280 & RL280	MILL	Y	400	706310063B	14.39	7.43	12.15	BLANK

FRAME SIZE	YAB	XA	XY	PART NUMBER	FRAME SIZE	YAB	XA	XY	PART NUMBER
FL210/FL180&RL210/FL182	7.38	4.25	4.25	602007-26-A	FL210/FL180&RL210/FL182	10.88	8.00	8.00	706310-3-B
FL250/FL160&RL250/FL160	8.44	4.25	4.25	602007-26-A	FL250/FL160&RL250/FL160	11.88	8.00	8.00	706310-3-B
FL280/FL180&RL280/FL180	9.12	4.25	4.25	602007-26-A	FL280/FL180&RL280/FL180	12.62	8.00	8.00	706310-3-B

(1) 1"AW CONDUIT.
(2) 1"AW PIPE TAP.
(3) CUSTOMER TO PROVIDE HOLE PER CONDUIT.
(4) E-ON-5A OR 1" TAP ON-4C

TERMINAL BOX CAN BE ROTATED FOR LEAD OUTLET AT TOP, SIDES OR BOTTOM.
TERMINAL BOX LOCATED ON OPPOSITE SIDE WHEN F-2, V-1, V-4, V-5, V-7,
OR C-1 MOUNTING IS SPECIFIED. BOX LOCATED ON TOP WHEN SPECIFIED.

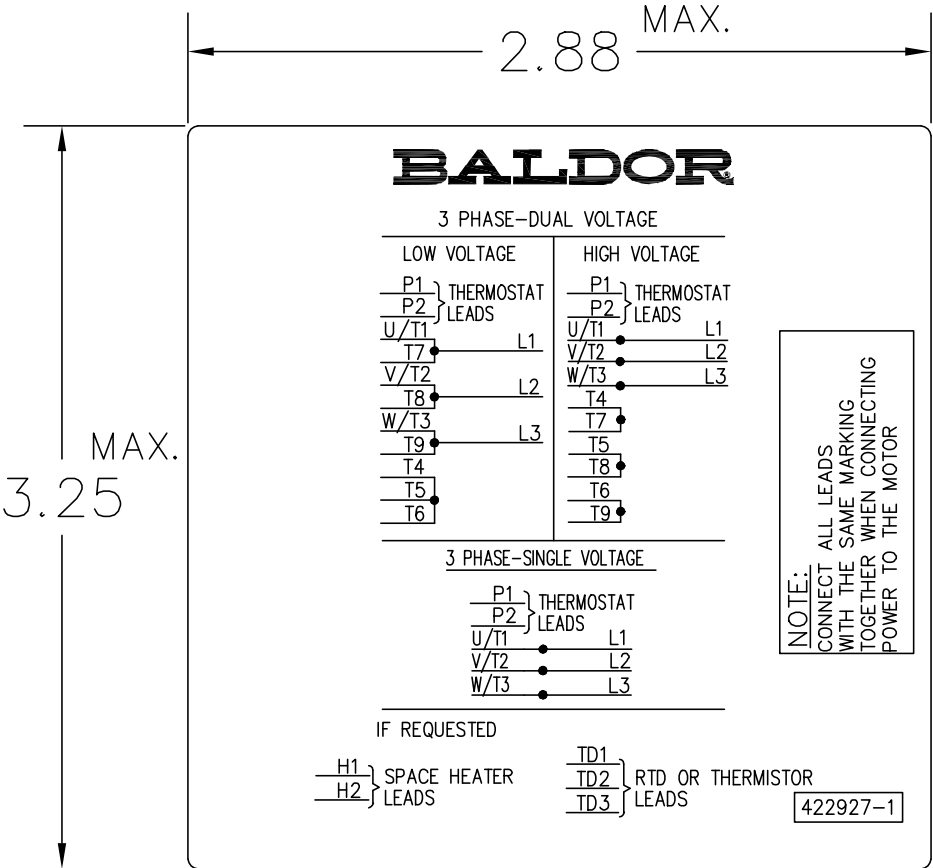
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: ADD 706310-637 & 639 BOX	VERSION: 06	TDR: 000001180260
REV. LTR: F	REVISED: 11:08:56 10/26/2021	BY: RGRWM
FILE: \\RGG\00003\692		
MTL: -		

BALDOR - RELIANCE®

DIM SHT NEMA RL210-RL280 FL180-FL280 IEC RDL132-RDL180

422927-001



NOTE:
DATA TO BE SIZED
SO THAT IT FITS INTO
MATERIAL DECAL
DIMENSIONS. MAKE
LETTERS & NUMBERS
AS LARGE AS POSSIBLE.

MATERIAL: CERAMATIC DGF-P4
PERMA GRIP ADHESIVE

ALL LETTERS, NUMBERS
AND LINES TO BE BLACK
ON WHITE BACKGROUND.

422927-001

REV. DESC: CHANGE BACKGROUND COLOR FROM GOLD TO WHITE		
REV. LTR: B	VERSION: 02	TDR: 000000788708
FILE: \RGG\00000\203	REVISED: 08:09:29 03/04/2013	
MTL: -	BY: RGGWT	

BALDOR

EXTERNAL CONNECTION LABEL

SH 1 of 1